

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6:		(11) International Publication Number: WO 95/10616
C12N 15/60, 9/88, C12P 19/02, C07H 3/10	A2	(43) International Publication Date: 20 April 1995 (20.04.95)
(21) International Application Number: PCT/EP94/03397		97 (74) Agent: HARDING, Charles, Thomas; D. Young & Co., 21 New Fetter Lane, London EC4A 1DA (GB).
(22) International Filing Date: 15 October 1994 (15.10.94)		4)
(30) Priority Data: 9321304.9 9321305.6 15 October 1993 (15.10.93) 9321301.5 15 October 1993 (15.10.93) 9321302.3 15 October 1993 (15.10.93) 9321303.1 15 October 1993 (15.10.93)	. ((81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ).
(71) Applicant (for all designated States except US): DANISCO A/S [DK/DK]; Langebrogade 1, P.O. Box 17, DK-1001 Copenhagen K (DK).		Published Without international search report and to be republished upon receipt of that report.
(72) Inventors; and (75) Inventors/Applicants (for US only): YU, Shukun Gumar Hejdemans Gata 29, S-212 40 Malmo (ISEN, Kirsten [DK/DK]; Hvidehusvej 13, DK-345 (DK). KRAGH, Karsten, Mathias [DK/DK]; S 139 A, DK-8260 Viby J (DK). BOJKO, Maja Frugtparken 11, DK-2820 Gentofte (DK). NIELS [DK/DK]; Engvej 38, DK-2300 Copenhagen S (DI CUSSEN, Jan [DK/DK]; Knabrostraede 25, 2., Copenhagen K (DK). CHRISTENSEN, Tove, M Elsa [DK/DK]; Søengen 30, DK-3450 Allerød (D	SE). B O Aller tavtrup [DK/D] SEN, Jo K). MA DK-12 [artel, J	O- rod vej - K ; -

(54) Title: USE OF α -1,4-GLUCAN LYASE FOR PREPARATION OF 1,5-D-ANHYDROFRUCTOSE

(57) Abstract

A method of preparing the sugar 1,5-D-anhydrofructose is described. The method comprises treating an α -1,4-glucan with an α -1,4-glucan lyase wherein the enzyme is used in substantially pure form. In a preferred embodiment, if the glucan contains links other than and in addition to the α -1,4-links, the α -1,4-glucan lyase is used in conjunction with a suitable reagent that can break the other links.